

Missouri Read, Lead, Exceed



Missouri's Strategic Initiative

- Missouri will train a minimum of 15,000 teachers in the Science of Reading, building teacher knowledge of how children learn to read and what type of instruction is most effective. We believe this to be fundamental to student acquisition of literacy skills and knowledge.
- Missouri will provide:
 - Language Essentials for Teachers of Reading and Spelling (LETRS®) Training
 - Regional literacy coaches to support LETRS® implementation
 - Grants for materials that support the Science of Reading

Why Is This Important?

- Aligning instruction with the science of reading gives students the best chance of becoming successful readers.
- The creation and development of connections in our brains, created primarily through instruction, is necessary for reading.
- Regardless of the textbook or instructional materials used, if the teacher does not have the knowledge of evidence-based practices and standards, all students will not acquire what is needed to learn.

The Simple View of Reading

$$\text{Decoding (D)} \times \text{Language Comprehension (LC)} = \text{Reading Comprehension (RC)}$$

Anything multiplied by zero equals zero.

At every grade level we must ensure that students have sufficient content knowledge and higher-order thinking skills to understand what they read. We must provide early evidence-based reading instruction that ensures students become strong decoders because once decoding is strong, the only limits to reading comprehension are the students' knowledge of the subjects about which they are reading and their ability to synthesize the information.

Hoover and Gough, 1990

References

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Due to scientific advancements in brain imaging, we better understand how the brain learns to read, and know that in all cultures there's not much variability.

All babies are born with the same brain mechanisms—they are very universal. There is no single "reading region;" therefore, reading requires building neural circuits across critical brain regions.

However, because brain development after birth is influenced by inputs from the environment, and because those inputs are unique to each child, every human brain is unique in its rate of development. High-quality early reading instruction that builds neural pathways is essential.

Reading is an aspect of language acquisition, and language acquisition begins with recognizing the sounds of one's spoken language. Reading involves taking the sound recognition and connecting it with visual components (letters and words)—thus, the need for phonics instruction.

Seidenberg, 2017

Learning to read is not a natural process...

Babies' brains are hardwired to learn a language. They don't need to be taught how to speak a language; it happens naturally. It is an amazingly complex skill, but because it is natural, we aren't aware of everything it involves.

Unlike learning a language, learning to read is not natural. And as complex as language is, reading is even more complex.

When medical research reports new methods to save lives, health care professionals adopt these methods as quickly as possible and change practices, procedures, and systems as needed to align with research findings. Education professionals need to be just as reactive when educational research reports evidence of proven methods that support young minds by helping them to become proficient readers. It is up to us to promote evidence-based practices throughout the education system. Young lives depend on it.

Moats, 2020



What Does the Research Tell Us?

The comprehensive body of evidence-based scientific research (The Science of Reading) from the fields of linguistics (language), neurology (the brain), psychology (the mind), literacy, and intervention reports clear evidence: explicit and systematic instruction in phonemic awareness, phonics, fluency, vocabulary, and comprehension benefits **all** kids. Our students deserve to learn from teachers and staff members with the highest level of knowledge in evidence-based reading instruction.

There Are **5** Essential Elements of Effective Reading Instruction

Phonemic Awareness

Ability to identify language sounds.



Phonics

Ability to recognize relationships between letters and the sounds they represent.

-at
bat
cat
sat



Fluency

Ability to read with speed, accuracy, and proper expression.



Vocabulary

Ability to build, store, and retrieve words and background knowledge.



Comprehension

Ability to acquire meaning from text.



National Reading Panel, 2000